

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A device configured for protection switching, the device comprising:

a detector within the device; and

a first protector, within the device, with the first protector configured to perform protection switching in response to one or more notifications of a particular condition of interest received from the detector, and to register with the detector to be notified of the particular condition of interest;

wherein the detector is configured to receive one or more registration requests from the first protector, and to notify the first protector of the particular condition of interest upon detection of the particular condition of interest per said one or more registration requests.

Claim 2 (previously presented): The device of claim 1, wherein said protection switching includes switching the physical path of traffic from a working facility to a backup facility while maintaining an UP state indication of a single logical interface including the working facility and the backup facility such that higher-level routing information does not change in response to said switching the physical path.

Claim 3 (currently amended): The device of claim 1, wherein said protection switching includes switching traffic to a backup facility from a facility corresponding to the particular condition of interest.

Claim 4 (currently amended): The device of claim 1, wherein said protection switching includes switching traffic to a backup component from a component corresponding to the particular condition of interest.

Claim 5 (currently amended): The device of claim 1, further comprising a second protector;

wherein the second protector is configured to perform protection switching in response to one or more notifications received from the first protector, and to register with the first protector to be notified of a second particular condition of interest;

wherein the first protector is configured to receive one or more registration requests from the second protector, to notify the second protector upon notification of the second particular condition of interest, and to register with the detector to be notified of the second particular condition of interest; and

wherein the detector is configured to identify the second particular condition of interest, and to notify the first protector of the second particular condition of interest upon detection of the second particular condition of interest per said one or more registration requests from the second protector.

Claim 6 (currently amended): The device of claim 1, further comprising a second protector;

wherein the second protector is configured to perform protection switching in response to one or more notifications received from the first protector, and to register with the first protector to be notified of a second particular condition of interest;

wherein the first protector is configured to receive one or more registration requests from the second protector, to notify the second protector upon notification of the second particular condition of interest if previously notified of ~~another~~ a third particular condition of interest else not to notify the second protector of the particular condition, and to register with the detector to be notified of the second particular condition of interest; and

wherein the detector is configured to identify the second particular condition of interest, and to notify the first protector of the second particular condition of interest upon detection of the second particular condition of interest per said one or more registration requests from the second protector.

Claim 7 (currently amended): The device of claim 1, further comprising a second protector;

wherein the second protector is configured to perform protection switching in response to one or more notifications received from the first protector, and to register with the first protector to be notified of a second particular condition of interest;

wherein the first protector is configured to receive one or more registration requests from the second protector, to notify the second protector upon notification of the second particular condition of interest if not previously notified of ~~another~~ a third particular condition else not to notify the second protector of the second particular condition of interest, and to register with the detector to be notified of the second particular condition of interest; and

wherein the detector is configured to identify the second particular condition of interest, and to notify the first protector of the second particular condition of interest upon detection of the second particular condition of interest per said one or more registration requests from the second protector.

Claim 8 (currently amended): The device of claim 1, further comprising a second protector;

wherein the second protector is configured to perform protection switching in response to one or more notifications received from the first protector and the detector, to register with the first protector to be notified of a third particular condition of interest, and to register with the detector to be notified of a second particular condition of interest;

wherein the first protector is configured to send a notification of the third particular condition of interest to the second protector in response to the notification of the third particular condition of interest by the detector, and register with the detector to be notified of the third particular condition of interest; and

wherein the detector is configured to receive one or more registration requests from the first and second protectors, to notify the first protector upon detection of the third particular condition of interest, and to notify the second protector upon detection of the second particular condition of interest.

Claim 9 (currently amended): The device of claim 1, further comprising a second protector;

wherein the second protector is configured to perform protection switching in response to one or more notifications received from the first protector, and to register with the first protector to be notified of a second particular condition of interest;

wherein the first protector is configured to receive one or more registration requests from the second protector, and to register with the detector to be notified of the second particular condition of interest;

wherein the detector is configured to identify the second particular condition of interest, and to notify the first protector of the second particular condition of interest upon detection of the second particular condition of interest; and

wherein the first protector is further configured to attempt to protection switch upon notification of the second particular condition of interest, and in response to said attempted protection switch failing, notifying the second protector of the second particular condition of interest, else not notifying the second protector of the second particular condition of interest.

Claim 10 (currently amended): The device of claim 1, further comprising a second protector and a third protector;

wherein the second protector is configured to perform protection switching in response to one or more notifications received from the first protector, and to register with the first protector to be notified of the particular condition of interest;

wherein the first protector is configured to receive one or more registration requests from the second protector, and to determine whether or not to cause a protection switch or to notify the second protector of the particular condition of interest;

wherein the third protector is configured to perform protection switching in response to one or more notifications received from the second protector, and to register with the second protector to be notified of the particular condition of interest; and

wherein the second protector is configured to receive one or more registration requests from the third protector, and to determine whether or not to cause a protection switch or to notify the third protector of the particular condition of interest.

Claim 11 (currently amended): A device configured for protection switching, the device comprising:

a detector, within the device, with the detector configured to detect a particular condition of interest and to notify a first protector of the particular condition of interest;

the first protector, within the device, with the first protector configured to receive an indication of the particular condition of interest from the detector, and to identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify a second protector of the particular condition of interest for the second protector to perform protection switching; and

the second protector, within the device, with the second protector configured to receive a notification of the particular condition of interest from the first protector, and in response to perform protection switching based on the particular condition of interest;

wherein said identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify the second protector of the particular condition of interest includes: attempting by the first protector to protection switch, and in response to failure of said protection switch, to notify the second protector of the particular condition of interest; and

wherein the first protector is configured to register with the detector for notification of the particular condition of interest.

Claim 12 (canceled)

Claim 13 (currently amended): The device of claim 11, wherein said identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify the second protector of the particular condition of interest includes referencing a data structure to identify whether or not a second particular condition of interest has been previously identified by the detector.

Claim 14 (currently amended): The device of claim 11, wherein said identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify the second protector of the particular condition of interest is determined based on a fixed or programmed set of rules or user configuration commands.

Claim 15 (currently amended): The device of claim 11, wherein the detector is further configured to detect a second particular condition of interest and to notify the second protector of the second particular condition of interest.

Claim 16 (currently amended): The device of claim 15, wherein the second protector is configured to receive an indication of the second particular condition of interest from the detector, and to identifying whether or not to (a) perform protection switching itself based on the second particular condition of interest or (b) to notify a third protector of the second particular condition of interest for the third protector to perform protection switching.

Claim 17 (currently amended): The device of claim 16, wherein said identifying whether or not to (a) perform protection switching itself based on the second particular condition of interest or (b) to notify the third protector of the second particular condition of interest is determined based on a fixed or programmed set of rules or user configuration commands.

Claim 18 (currently amended): A device configured for protection switching, the device comprising:

a detector, within the device, with the detector including means for detecting a particular condition of interest, and means for notifying a first protector of the particular condition of interest;

the first protector, within the device, with the first protector including means for receiving an indication of the particular condition of interest from the detector, and means for identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify a second protector of the particular condition of interest for the second protector to perform protection switching; and

the second protector, within the device, with the second protector including means for receiving a notification of the particular condition of interest from the first protector, and means for performing protection switching based on the particular condition of interest;

wherein said means for identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify the second protector of the particular condition of interest includes means for attempting by the first protector to protection switch and in response to failure of said protection switch, to notify the second protector of the particular condition of interest; and

wherein the first protector is configured to register with the detector for notification of the particular condition of interest.

Claim 19 (canceled)

Claim 20 (currently amended): The device of claim 18, wherein said identifying whether or not to (a) perform protection switching itself based on the particular condition of interest or (b) to notify the second protector of the particular condition of interest includes means for referencing a data structure to identify whether or not a second particular condition of interest has been previously identified by the detector.

Claim 21 (currently amended): The device of claim 18, wherein the detector includes means for detecting a second particular condition of interest and means for notifying the second protector of the second particular condition of interest.

Claim 22 (currently amended): The device of claim 21, wherein the second protector includes means for receiving an indication of the second particular condition of interest from the detector, and means for identifying whether or not to (a) perform protection switching itself based on the second particular condition of interest or (b) to notify a third protector of the second particular condition of interest for the third protector to perform protection switching.

Claim 23 (canceled)

Claim 24 (currently amended): The device of ~~claim 23~~ claim 11, wherein the second protector is configured to register with the first protector for notification of the particular condition of interest.

Claim 25 (new): The device of claim 18, wherein the second protector is configured to register with the first protector for notification of the particular condition of interest.